

### Protect Your Gear From Static's Zap

CMOS circuitry and microprocessors have been a real boon to the Amateur Radio community. They have brought computer control to our fingertips and they have made truly computerized, easy-to-use, feature-packed rigs a reality. This type of circuitry has also been responsible for a shrinking size of our gear and has made the shirt-pocket handheld a reality.

But, for all its benefits, CMOS and microprocessors have a problem. They don't like static charge and all it takes is a little zap to send your brand-new computerized wonder rig into the blue, at worst, or it can cause a severe case of brain scramble, at best.

Yet, the picture isn't as bleak as it seems because there are ways to protect your equipment from static's sting and that's what we'll hear about at the January meeting.

The speaker for the evening will be Ted Danglemeyer, an expert on Electrostatic Discharge or ESD and he will not only explain what the problems are, but how to prevent them. During his talk, he will present a demonstration of ESD and will also show us some videotapes concerning the phenomenon. An engineer by trade, Danglemeyer has long experience with static protection and he will bring that expertise to the meeting.

As usual, the meeting will be the first Thursday of January -- Jan. 3 -- and it will be held at our club headquarters at the Danforth Museum, Lexington Street, Framingham.

A business meeting will precede Mr. Danglemeyer's talk and will begin at 7:30 p.m.

Parking will be available at the garage next door to the museum. Use the Lexington Street entrance, the one between the rear of the museum building and the garage.

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### Club Votes to Upgrade Equipment

Acting on the request of Lew Nyman, K1AZE, trustee of the club station W1FY, FARA at its December meeting, voted to upgrade the equipment at the station.

Currently, the equipment consists of a Heathkit SB-102 transceiver, which has been on loan from the club from Jim Boates, WA1UEH, and a two-meter, crystal-type transceiver.

According to Lew, there are several reasons to make the change, one of the most important of which is the ability to go mobile in the event of an emergency. The SB-102, a tube-type rig, doesn't have the ability to handle mobile communications and would therefore be limited in such a situation.

Further, Lew noted, the club is about to have full RTTY capability

and it would be wise to have a rig which not only was capable of handling mobile work, but would also combine a general coverage receiver so the rig could be used to receive RTTY information from frequencies other than Amateur Radio.

Accordingly, Lew suggested two rigs which could fill the bill, the Kenwood TS-430S and the Yaesu FX-757.

During the discussion, Bob Gettys, N1BRM, suggested that the club not limit its search to just Kenwood and Yaesu and noted that ICOM also offered HF rigs which might fill the bill. Marc Stern, N1BLH, suggested the club also look into used equipment in an effort to keep costs down.

Also during the discussion, it was suggested that the club consider buying an all-mode two-meter rig, but the discussion indicated this capability was not needed.

It was also noted during the discussion on this motion that the club is looking into better security for W1FY. Suggestions included installing steel doors and bars on the window; installing an alarm system, and purchasing ARRL equipment insurance.

The motion was made by Howard Davis, WA1VFJ, that we purchase the equipment for the club station. The limit will be set at \$2000.

Dick Marshall, WA1KUG, then asked if anyone would use the new equipment and several operators indicated they would. Schedules can be set up by contacting those who have access to the building.

The motion passed with one opposing vote.

One other suggestion which was made at the time was SSTV equipment. However, it was felt that this should be considered at a later time.

In other club news, Hal Allman, WN1TKD, who was unable to attend the club meeting in person, filled us in about plans for the FARA banquet on March 31, 1985. Hal gave us a briefing via the 147.75/15 repeater. According to Hal, the arrangements for the banquet have been pretty much finalized. The meal will be a roast beef dinner and will cost \$10 per person. The club will cover a portion of the cost of the dinner and the band.

The banquet will begin at 5:30 with a cocktail hour and dinner will be served at 6:30 p.m. It had been scheduled to begin an hour later, but a majority of FARA preferred the earlier time. Also, the band will be available for three hours beginning at 7:30, but the length of time they will play may be extended if there's enough interest.

A telephone squad will be set up to inform all members about the event and reservations for the event MUST BE IN BEFORE THE BANQUET. They may be sent to Dick Marshall, WA1KUG, 37 Lyman Road, Framingham, MA 01701. Checks should be made out to FARA.

Discussion then turned to Field Day, which will be the last weekend in June, and Dick, WA1KUG, who has served as chairman and chef of the event for the last couple of years, noted he had looked into the possibility of having the event at Framingham Common, rather than at the

Badger Road site. However, this site isn't available because of traffic and parking problems. The reason a new site has been suggested is for increased exposure and better public access. The town officials with whom Dick talked did suggest an alternative site, Bowditch Field, to which everyone agreed.

With the business finished, Nick Martin, WA1VFH, gave us an informative and well-illustrated talk on the GTE High Energy Electrical Test Facility.

The meeting then adjourned and everyone headed for the specially prepared refreshments of the Hospitality Committee, chaired by Karen Nyman, KA1BYP. The scrumptious goodies were prepared by Marjie Stern, KA1HIA, Karen, KA1BYP, Toby Shaffer, N1DDS, Mary Weiss, KA1HGL, the sister of Charlotte Luddington, N1CTW, Ken Horton's (KA1GFN) mother and other contributors.

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#### President's Corner

As 1984 comes to a close, I want to take this opportunity to thank all those who have invested their time to make 1984 the best FARA year ever. Among FARA's achievements we proudly list:

1. Public service communications during the marathon, 10-K races, Shriner's parade and the State Lumber fire.
2. Two successful Flea Markets and Field Day.
3. Scholarships to 5 worthy recipients to help with their continuing education.
4. Merger of the Framingham 147.75/15 repeater into FARA and installation of an amplifier at the repeater.
5. All-time high membership of 150 members.
6. Several newly licensed operators who completed the club's Saturday morning classes.
7. Designation as a Special Service Club by the ARRL.

We look forward to an even more successful year in 1985. Our goals for 1985 include an upgrade of the club station; increased operation of the station equipment by members, and more active participation by the membership in general in club activities and events. As in the past we will continue to give major emphasis to public service.

If you would like to become more active, contact a member of the Board of Directors listed elsewhere in the newsletter.

To all club members, a healthy and Happy New Year and an even better club year!

## Repeater, Club Dues Now Due

If you looked closely at your mailing label on this month's newsletter, some of you may have noticed a change. Instead of having one date, it has two. The second date indicates when your dues to the repeater expire. (If one of the dates is highlighted, it means your FARA dues are due now.)

This information comes from Treasurer Dick Marshall, WA1KUG, who notes that there are now 53 operators with paid-up dues in the repeater.

If you would like to be a member of the repeater, now is the time to pay your \$10 dues to join.

You see, when FARA took over the repeater in September, membership in the repeater wasn't automatically conferred on FARA members. According to the merger of the Framingham Repeater Assn. and FARA, the repeater is a separate entity within the overall organization of FARA and separate dues are required to belong. The dues are used for maintenance and any future upgrades to the repeater. No money from the FARA treasury will be used for these purposes. So, if you would like to use the repeater's facilities, now's the time to pay your dues to it.

At the same time, it's also time for those of you who haven't paid your club dues to pay them. Dues are \$10 for single and family members and \$5 for senior citizens and students. They can be mailed directly to Dick at 37 Lyman Road, Framingham, MA 01701. Make your check payable to FARA.

For members of the repeater who automatically became FARA members on the amalgamation of the groups, it's time to pay your FARA dues.

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## W1FY/R Report

Things are moving ahead with the repeater, according to Trustee Lew Nyman, K1AZE. By the time you read these words, a newly manufactured and tuned set of duplexers may be in line, ready to help W1FY/R mind its manners.

The duplexers, or tuned cavity filters, should help improve the performance of the repeater and may help eliminate some of the rain static which has plagued the machine for the last couple of years during foul weather. The cavities will also play an important role when we return to a single transceive antenna at the site. We are now using split transmit and receive antennas. The antenna to which we will be moving is a high-gain Phelps-Dodge Station Master. This antenna should help balance the coverage of the repeater; improve performance, and eliminate the rain static problem which has plagued the machine for the last couple of years.

Using a single antenna for transceive purposes isn't without its own set of problems, though. Although the antenna we will be using has high gain, it may also bring with it desensing and other problems. So, the new cavities are necessary.

Meanwhile, the repeater just keeps perking along, Lew noted, although there was a minor glitch with the amplifier last month. However, it was short-lived and the device was back in line within three days.

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#### Silent Key

It is with great regret that we announce the passing of Martin Norton, W1ZWJ, a past president of the Framingham Amateur Radio Assn. Mr. Norton passed away while visiting Florida, according to Woody Woodbury, W1RCJ, who informed us of Mr. Norton's passing just as The FramingHAM Circuit was being prepared for printing.

Mr. Norton, who held the presidency of FARA during the early 1960s, lived in Marlboro.

We extend our sympathies to Mr. Norton's family and acknowledge his service to FARA.

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#### A Tip of the Editor's Hat To . . .

...Marty Green, WA1WHU, who had his solo recently following several months of flight instruction. His instructors are Bob Press, KB1EW, and Dick Marshall, WA1KUG.

...Arnie Zunick, K1BPM, for the long hours of work he put in readying the new cavities for the repeater site.

...The entire Hospitality Committee for their delicious goodies for the December meeting.

...George Cleveland, WA1QGU, new club member and longtime repeater member, for his many unselfish deeds assisting other operators on the repeater during emergencies.

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#### Swap & Shop

For Sale: Like-new MC-35 high-impedance hand mic for Kenwood transceivers. Noise-cancelling feature. \$25. Contact Marc, N1BLH, on repeater or drop note to club box.

For Sale: Heathkit Electronic Design Experimenter board. Features include signal generator, variable power supply 1-15 VDC, 20 Hz to 20 KHz signal generator, two 60 Hz signal sources, 15-30 volts. One breadboard socket, 1000 ohm/1 Kohm potentiometers. Factory assembled and tested. \$40. Contact Marc, N1BLH.

For Sale: Tempo S1 walkie-talkie with leather case, telescopic and rubber duck antennas, wall and mobile charger. \$125. Contact Lew, K1AZE, 879-7456.

For Sale: Mattel Intellivision video game, four cartridges, coax

and RF modulator. \$50. Contact Marc, N1BLH.

For Sale: Digital voltmeter with documentation, works well, mint condition. \$30. Contact Marc, N1BLH.

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### Amateur Exams Becoming Widespread, 19/79 Plans March Test

Now that the Volunteer Examiner concept has been in place for the last several months, Amateur Radio exams are starting to become more and more available. We are planning one for our April Flea Market and the 19/79 Amateur Radio Assn. will hold one in March.

According to a recent news release from 19/79, the group is sponsoring all level FCC exams. They will be held Saturday March 16, 1985 at Ryan Hall in the Ireson Building at 493 Western Ave. (Route 107), Lynn from 10 a.m. to 1 p.m. The building is in the Lynn Hospital complex.

The pre-exam requirements for the general, advanced and extra applicants: submit a 610 Form, plus a check, made payable to ARRL/VEC, for \$4. These are to be sent 30 days (2/13/85, no walk-ins) prior to the exam to Ralph Gandolfo, KA1E, 18 Murdock Dr., Peabody, MA 01960.

The pre-exam requirements for the Tech: the same as the higher class license, but mailed to Bob Kalustian, WA1DVR, 36 Columbia Rd., Arlington, MA 02174.

The Novice pre-exam requirements: there is no fee and we will accept walk-ins, but prefer you mail a 610 Form 30 days (2/13/85) prior to the exam to spread out our workload. If you do mail a 610, it should be sent to WA1DVR.

The 19/79 ARA gratefully acknowledges the help of Steve, WA1DFL, Craig McGarvey and the Lynn Hospital for their part in obtaining the use of the test facilities.

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### Editor's Note

As you have probably noticed by now, the newsletter looks different again and that's because I'm back at the editor's post following a recent bout with a medical problem. I won't go into all the gory details here about what happened or when because you've all probably heard them already.

I would like to take the opportunity at this time to publicly thank Lew Nyman, K1AZE, Dick Marshall, WA1KUG, Bob Press, KB1EW, Marsha Marshall, KA1JIR, and Karen Nyman, KA1BYP, for handling the newsletter during the last couple of months.

And, I would also like to thank all of you who took the time to drop cards in the mail; see me at the hospital, or ask after me. I appreciated every wish.

And, there is one big thank-you I'd like everyone to know about and it's for my XYL, Marjie, KA1HIA. She's the one who has had to put up with me for the last couple of months and take the burden of running everything around our QTH on her shoulders. It is a task that she has done with few complaints and a great many smiles and without her support I don't know how I would have gotten through so far. So to you, Marjie, a special thanks, I don't know how I'd have done it without you.

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